

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200070033-6

1 OF 1

FOR OFFICIAL USE ONLY

JPRS L/9040

17 April 1980

# Japan Report

(FOUO 10/80)

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

FOR OFFICIAL USE ONLY

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

For further information on report content  
call (703) 351-3067 (Japan, Korea,  
Mongolia); 351-2760 (Vietnam, South and  
East Asia).

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF  
MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION  
OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

FOR OFFICIAL USE ONLY

JPRS L/9040

17 April 1980

## JAPAN REPORT

(FOUO 10/80)

### CONTENTS

#### POLITICAL AND SOCIOLOGICAL

Ohira Administration Building Irrespective of Public Opinion (Takehiko Takahashi; MAINICHI DAILY NEWS, 19 Mar 80) ...	1
Tripartite Consultations Continuing (Takehiko Takahashi; MAINICHI DAILY NEWS, 27 Mar 80) ...	3
Ohkita's Political Style Criticized (SANKEI, 24 Nov 79) .....	5
Defense Major Issue in LDP Election Platform (YOMIURI SHIMBUN, 22 Mar 80) .....	8
'JAPAN TIMES' Reviews LDP Intraparty Strife (Minoru Shimizu; THE JAPAN TIMES, 27 Mar 80) .....	10
'JAPAN TIMES' Views Democratic Socialists' Coalition Strategy (Editorial; THE JAPAN TIMES, 2 Apr 80) .....	13
Japan Should Establish 'Independent Footing' (Shoichi Saeki; SANKEI SHIMBUN, 21 Dec 79) .....	15
Media on Japanese Think-Tank Groups (NIHON KEIZAI SHIMBUN, 7 Jan 80) .....	19

#### MILITARY

Defense Expenditures Discussed (Editorial; THE DAILY YOMIURI, 23 Mar 80) .....	21
---	----

- a -

[III - ASIA - 111 FOUO]

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

CONTENTS (Continued)	Page
ECONOMIC	
Report on Trade Strategy in 1980's Discussed (Editorial; MAINICHI DAILY NEWS, 24 Mar 80) .....	23
'JAPAN TIMES' on Recurring Japan-U.S. Trade Dispute (Editorial; THE JAPAN TIMES, 3 Apr 80) .....	26
Cooperation Sought in Proposed 'Second Panama Canal' Project (Editorial; THE DAILY YOMIURI, 24 Mar 80) .....	28
SCIENCE AND TECHNOLOGY	
U.S.-Japan: Fierce Competition Sets Forth in Semiconductor Field (NIHON KEIZAI SHIMBUN, 17 Jan 80) .....	30
Japan-U.S.-FRG Cooperation in Auto Development Sought (Editorial; NIKKAN KOGYO SHIMBUN, 28 Feb 80) .....	34
Japan Auto Makers Buying Robots in Quantity (NIKKEI SANGYO SHIMBUN, 22 Feb 80) .....	36
Expert Discusses Future of Tidal Wave Power Plant (Yoshio Masuda Interview; NIKKEI BUSINESS, 25 Feb 80)	38

- b -

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

# OHIRA ADMINISTRATION BUILDING IRRESPECTIVE OF PUBLIC OPINION

Tokyo MAINICHI DAILY NEWS in English 19 Mar 80 p 4

[NAGATACHO DOINGS Column by Takehiko Takahashi: "Administration Building Irrespective of Public Opinion"]

[Text] The results of two public opinion polls on the Ohira cabinet have recently been announced. In one, an Asahi Shimbun survey, the ratio of those supporting the Ohira cabinet was 27 percent and those not supporting it, 53 percent.

In the other public opinion poll, conducted by Yomiuri Shimbun, those supporting the Ohira cabinet were 30.8 percent and those not supporting it, 49.5 percent.

The one thing in common between these two polls is an increase seen in the percentage of nonsupport, in comparison with the previously held polls—3 percent more in the case of Asahi and 2.2 percent in the case of Yomiuri.

The clear indication that one-half of the people do not support it must be a big headache for the Ohira cabinet. When similar figures appeared in public opinion polls for the Kishi, Sato and Tanaka cabinets, they withdrew shortly afterward.

Of course these three cabinets did not resign just because of the results of the public opinion polls. The Kishi cabinet was toppled by the disturbances involving the U.S.-Japan Security Treaty. The Sato

cabinet, which had continued for a very long period of time, made its exit following the reversion of Okinawa. The Tanaka cabinet resigned following severe criticisms of its "money politics."

The Ohira cabinet was born as the result of the Liberal Democratic Party's experiment in having all the party members vote in the party presidential election. The ratio of nonsupport for the Ohira cabinet had already reached

about 50 percent last year. In the general election for the House of Representatives held at such a time, the Liberal Democratic Party suffered a setback, contrary to earlier predictions.

It was under such circumstances that the election of the prime minister took place in the Diet. Two candidates from the LDP, Masayoshi Ohira and Takeo Fukuda, competed for the premiership. Ohira was reelected by a narrow margin. In this respect, the Ohira administration has always emerged from out of the LDP's severe and at the same time ugly internal strife. It could well be said that the Ohira administration is destined to tread a thorny path.

## Rate Of Support

Although the rate of support for the Ohira administration has thus fallen and the rate of nonsupport has gone up, whether the Ohira administration should advance or retreat has not become a subject of conversation in the political world. This is probably because the rate of support for the LDP itself has not altered greatly.

In the Asahi survey, the rate of support for the LDP was 46 percent, and in the Yomiuri poll, 39.9 percent. This figure is much higher than the support shown for the Japan Socialist Party, the No. 1 opposition party—21 percent (Asahi) and 13.9 percent (Yomiuri).

What this means is that even if the Ohira cabinet were to withdraw, the next government to be formed will also be an LDP cabinet. This further means that the cabinet is unrelated with the support or nonsupport of the populace but is decided by strength factors within the LDP.

Prime Minister Ohira intends to be reelected in the second party presidential election in autumn this year and to continue holding the reins of administration.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

But a formidable challenger has appeared — Toshio Komoto, chairman of the LDP Policy Affairs Research Council. It is said that out of the 3,200,000 votes to be cast, Komoto is assured of one million. If Yasuhiro Nakasone and Takeo Fukuda or their substitutes become candidates, there is a possibility of Komoto ranking first in the preliminary voting.

The only thing is that Komoto does not have a staff within the LDP. In this respect, Prime Minister Ohira does have members of his staff among those concerned with the election of the party president.

A strategy is being worked out to cope with the contingency of Komoto placing first in the preliminary voting. In the previous party presidential election, Takeo Fukuda placed second in the preliminary voting despite the fact that he was the prime minister. Because of this, he withdrew as a candidate in the main election.

If Ohira places second this time, there is a possibility of this precedent being brought out. Prime Minister Ohira is confident that even if he places second in the preliminary voting, he will be able to win in the main election with the overwhelmingly strong support of the Ohira-Tanaka alliance. What he fears is that public opinion might insist on "respect for precedent." He would be in a bad position if the party becomes agitated by this public opinion and pressures him to withdraw his candidacy just as Fukuda did.

A plan has therefore been conceived centering on the date of the main election. It is judged that if the main election were to be held immediately on the day after the first and second place candidates are decided, it will be unnecessary to be troubled by public opinion calling for "respect of tradition" and its effect on the party.

In this way the party presidential election is about to move in a manner favoring a candidate having a staff inside the party. Since this is a sphere that the power of public opinion cannot reach definitely, the other candidates have no way of coping with such a strategy.

*(The writer is an adviser to The Mainichi Newspapers and former chief editorial writer).*

COPYRIGHT: Mainichi Daily News 1980

CSO: 4120

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

TRIPARTITE CONSULTATIONS CONTINUING

Tokyo MAINICHI DAILY NEWS in English 27 Mar 80 p 2

[NAGATACHO DOINGS Column by Takehiko Takahishi]

[Text]

Takeo Fukuda, Takeo Miki and Yasuhiro Nakasone met and talked together for about two hours on March 18 in the evening. These three influential leaders of the Liberal-Democratic Party are representatives of the group that opposed Masayoshi Ohira in the designation of the prime minister following the general election last year.

At that time a "Society to Improve the Liberal-Democratic Party" was formed. It was not certain up to now whether this organization was still in existence. But now that the foregoing tripartite conference has been held, the impression given is that the "Society to Improve the Liberal-Democratic Party" is remaining and is ready to take action at any time. This cannot be very pleasant for Prime Minister Ohira.

At the same time, a problem is posed by the process by which the tripartite conference took place. There are also voices among the three antimainstream factions that it was

inappropriate for such a meeting to be held at this time. One of those promoting the tripartite meeting was Toshiichi Fuke. He is a Diet member elected from Kagawa Prefecture although his constituency differs from that of Prime Minister Ohira.

When Fuke broached the subject of a tripartite meeting to Takeo Miki, the latter asked, "what does Nakasone think about it?" and did not express his approval at once.

Fuke next approached Nakasone, remarking that "Miki is agreeable, so how about it?" Nakasone thought it would be all right if Miki favored it and contacted Fukuda, saying, "since Miki approves of the meeting, shall we hold it?" Fukuda, on his part, saw no reason to refuse if both Miki and Nakasone favored it, and expressed his willingness to meet.

**Fukuda Faction**

Among those in the Fukuda faction who were aware of how

this meeting was called, the view was expressed that "since it has been decided, it can't be helped, but complications within the Liberal-Democratic Party ought to be avoided prior to the House of Councillors election." Accordingly, before the tripartite meeting took place, a general meeting of the Fukuda faction (Seiwakai) was held to discuss counter-measures related to the tripartite conference.

The atmosphere within the faction put the brakes on Fukuda. He probably had the thought that "if things continue as at present, the conservative influence will be destroyed. If Prime Minister Ohira does not carry out a party reform, the LDP may have to split in order to maintain conservative influence."

It was from such a viewpoint that former Prime Minister Fukuda called for a freezing of the preliminary voting in the party presidential election. In his view, "a system that gathers party members by the power of money and that

FOR OFFICIAL USE ONLY



FOR OFFICIAL USE ONLY

decides the party president in such a way should be stopped."

Fukuda expressed this opinion at the tripartite conference. Nakasone accepted it, in principle, but Miki applied a brake by saying, "since a screening of party members is being carried out at present, I would like to observe first how the situation develops."

This was an attitude that Miki had to take since he was the original advocate of a party presidential election with the participation of all the party members and, in addition, Toshio Komoto of the Miki faction has gathered a very large number of party members and is carrying out an election campaign in a positive manner.

The tripartite conference ended with an expression of views by the three leaders at later meetings held individually with Prime Minister Ohira. Consequently, Prime Minister Ohira must be feeling relieved.

At the same time, dissatisfaction is rising within the LDP that the unfavorable trends seen in recent public opinion polls concerning Prime Minister Ohira stem from Ohira's political stance.

Under these circumstances, Prime Minister Ohira is feeling very angry at Fuke who masterminded the tripartite

conference in order to build up a mood "critical of Ohira." It is said that Prime Minister Ohira remarked vehemently to a certain person that "a fellow like that must be disposed of." For the ordinarily placid Ohira to have spoken so strongly indicates how irritated Ohira must have been by the fact that the tripartite conference was held.

The three leaders do not desire to become "villains" plunging the party into confusion prior to the House of Councillors election. They prefer to act after seeing the results of that election. The view that "obtaining 61 seats will assure a majority" is being countered by the antimainstream with the opinion that "66 seats will be the demarcation line between victory and defeat."

If less than 66 seats are obtained in the House of Councillors election, the antimainstream intends to hold Prime Minister Ohira responsible for the "defeat."

The tripartite conference, which we had tended to forget, is still very much alive. No matter what the intentions of these three leaders may be, the fact that the tripartite meeting still exists is something that Prime Minister Ohira must find disagreeable.

COPYRIGHT: The Mainichi Daily News 1980

CSO: 4120

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

OHKITA'S POLITICAL STYLE CRITICIZED

Tokyo SANKEI in Japanese 24 Nov 79 p 2

[Article: "Foreign Minister Ohkita: How to Break the Political Wall; Strong Opposition from the Ministry of International Trade and Industry, Minister of Finance; Claim of 'Deafness to Internal Affairs,' His Work will be Watched During Prime Minister's China Visit"]

[Text] It has been about 2 weeks since the inauguration of the second Ohira cabinet. With the cabinet having just come into being after a difficult birth--even though private comments are such that it is a "light-weight" cabinet--talk about cases of selling fund-party tickets involving the Minister of Justice Kuraishi and Director General Obuchi of the Prime Minister's Office has been quite lively.

In the midst of this, what has attracted people's attention in various ways, both within and outside government as a rare-breed among the new cabinet members is the selection--after an interval of 20 years from the time of Foreign Minister Fujiyama in the Kishi cabinet--of a foreign minister from outside the government bureaucratic circle. No sooner had he taken over the office than Ohkita demonstrated his skill in diligence and faithful manner, and the Prime Minister also gives--closing even further his narrow eyes--a sign of being very satisfied as if to say "My choice was a hit."

Presently, however, within government circles each person has his own different assessment regarding the new foreign minister. Among international economists there is a strong vote of expectation that he will be active in the field of economic diplomacy, for he is considered to be an authority on European affairs and is thought to be keen on the existing problems between the developed and undeveloped countries. Perhaps Ohkita himself was aware of this fast and furious pace of "Ohkita diplomacy" following soon after he took up his post, and set out to take care of, one after another, cases of "no-strings attached" yen loans to China; the doubling of government development aid over 5 years, and the voluntary restraints on the import of Iranian crude oil which the U.S. did not import.

But the Ministry of International Trade and Industry and the Finance Ministry rejected Ohkita's idea in every way by saying, "Purchasing of Iranian oil

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

from the spot market should be a gradual process and done slowly," "The matter of increase in financial aid should be examined carefully with consideration of problems related to restructuring the national economy," and "even in the European nations and the U.S., no one switched entire loans to the loan with no-strings attached." On top of all this we heard, the voices that say Ohkita is "totally out of tune when it comes to domestic affairs"; he can't make any "sense in the petroleum issue," and holds the level of a mere "critic's mentality."

Hearing the stronger reaction than expected, Foreign Minister Ohkita toned down these statements by saying that those were his "personal views," but the authorities in charge of the foreign minister's office, in order to somehow back up the new foreign minister's view, frantically sought to legitimize his statements. At the least, to take care of the matters which the Foreign Ministry can handle alone, the Foreign Minister conferred and advised the Prime Minister and they began tackling the question of the appointment of an "ambassador selected from the private circles" [selecting the U.S. ambassador].

Naturally, regarding this problem of selecting "ambassadors from the private circles," within the ministry, there are strong words of opposition and Foreign Ministry officials feel there is no point in striving toward the goal when the final post of a diplomatic career is spirited away by a person in private circles. And there is a trend that sees the situation as such that "among the over 90 active ambassadors, those competent enough to be appointed [as U.S. ambassador] account for about half," (says a mid-level official). And the top level officials of the ministry seem to have decided to look into the matter in a positive way.

This being said, the Foreign Ministry has no intention whatsoever to appoint someone from the private circles as ambassador to an important nation such as the U.S., which the prime minister attempted to do. The ministry officials might consider [non bureaucrats] for consul generals or ambassadors to small nations; even then very few will have that chance. Frankly, if the ministry decided to do so, then it is only an attempt at saving the prime minister's face.

It is being reported that the reason the prime minister is particularly anxious to pick the ambassador to the U.S. from the private circle and not from the career diplomats is because he felt impatient over the Foreign Ministry's slow and awkward dealing with the economic friction which has developed between the U.S. and Japan toward the end of last year through the spring of this year. There is a view circulating that the appointment was given as a reward for the cooperation of the Shin Jiyu Club (New Liberal Club) in the election to elect the prime minister as a Liberal Democratic Party President (in the House of Councillors election a year ago, Foreign Minister Ohkita announced his candidacy from the New Liberal Club) but certainly the object was to promote smooth economic relations with foreign countries.

FOR OFFICIAL USE ONLY

The conference on the 26th and 27th between Japan and the Economic Council members of the countries of the Association of Southeast Asia Nations and the visit of the prime minister to China next month and the foreign minister's "stage appearance" have drawn near, but will [Ohkita] really be able to fulfill the prime minister's expectations? The wind from bureaucratic circles to "no-badge" cabinet members (cabinet members who do not come from the political/bureaucratic circle) is unfavorable, and the wall between Ohkita and ministry officials is thick.

COPYRIGHT: Sangyo Keizai Shimbunsha 1979

9501

CSO: 4105

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

DEFENSE MAJOR ISSUE IN LDP ELECTION PLATFORM

OW241037 Tokyo YOMIURI SHIMBUN in Japanese 22 Mar 80 Morning Edition p 1 OW

[Excerpts] The Liberal Democratic Party [LDP] on 21 March adopted a 20-point election pledge for the upper house race with "the consolidation of defenses" as its foremost goal, thus revealing its determination to contest the opposition mainly on the defense issue.

At his recent talks with Foreign Minister Okita, U.S. Defense Secretary Brown requested "a sizeable increase" in Japan's defenses. Viewing this firm U.S. stance as "a positive factor in creating a national consensus on the defense issue," the LDP has decided to have the burgeoning mood for defense buildup settle among the public during the election race.

On the same day, the Komei Party also announced its "election policy" calling for the "maintenance of the self-defense forces" and the "continuation of the security treaty." In this way the defense issue is rapidly becoming a key issue in the upper house election. The LDP plan to strengthen national defenses apparently stems from a strategy to dodge the "price" and "political ethics" issues- which may prove fatal to the LDP in the election-- and mount a counterattack on the tripartite coalition plan conceived by the Socialist, Komei, and Democratic Socialist parties. Thus the upper house race has begun with the shaping of contesting issues.

Commenting on Secretary Brown's request for increased defense buildup, a top LDP official said that this request is merely advance-guard skirmishing prior to Prime Minister Ohira's U.S. visit in May, and that he expects the United States to come up with concrete requests during the prime minister's visit. The LDP official indicated that in anticipation of these concrete requests, Japan would rather propose to build up defenses on its initiative.

As for the current issue concerning the ratio between defense outlays and the GNP, the same official said that "there is no need to settle it at this stage" in the election race, the LDP will aim to form a national consensus in favor of defense buildup while actively discussing the proposed "defense secrets protection act" and the arms export issue during the election campaign.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

At its 21 March meeting, the LDP foreign relations panel decided to insert in the 20-point election pledge a clause requesting withdrawal of Soviet troops from Afghanistan at the head of the passage stipulating the goal of "promoting peace diplomacy." The meeting confirmed the plan to drive home the "importance of the security and defense issues under international tensions." In this way the LDP is speedily laying the groundwork for the formulation of election issues.

COPYRIGHT: Yomiuri Shimbunsha 1980

CSO: 4105

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

'JAPAN TIMES' REVIEWS LDP INTRAPARTY STRIFE

OW280314 Tokyo THE JAPAN TIMES in English 27 Mar 80 p 12 OW

["Politics Today--and Tomorrow" column by Minoru Shimizu: "LDP Chiefs Debate Win-Loss Margins"]

[Text] With the July House of Councillors election only 3 and 1/2 months away, intraparty strife in the Liberal-Democratic Party has begun to surface anew, although the confrontation between the leadership group and the anti-leadership factions is much less intense than in last November when a frontal clash between the two camps threatened to split the party. What is now taking place may be likened to an exchange of jabs in a boxing match.

Prime Minister Masayoshi Ohira conferred with the leaders of the three anti-leadership groups for three days from March 24 and sought their cooperation for party unity in the coming upper house election. The three comprise former Prime Ministers Takeo Fukuda and Takeo Miki and former LDP Secretary-General Yasuhiro Nakasone. They concurred with Ohira that the July election, the first national election in the '80s, was critical in that the LDP majority in the upper house was at stake. They did, however, differ with Ohira on what to set as election goals.

Leaders Criticize Ohira

Prior to the talks with Ohira, the three leaders had conferred among themselves last week and come up with a critical position concerning Ohira's party administration and his political stance in relation to the coming election. It was the first time since the party squabble last November that the three had conferred.

Among the opinions voiced in their conference were that the LDP must formulate a policy platform that is easy for the people to understand and that the LDP will have a hard time beating the opposition in the July election in light of the currently stagnating party morale.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Majority Not Enough

And they agreed that the LDP's goal in the upper house election should be set at securing a sufficient number of seats to enable smooth steering of that chamber, not just the 61-seat minimum for maintaining a majority in the upper house.

Because 66 LDP councillors have three more years remaining in their six-year terms, the LDP can gain a majority of 127 in the 252-seat upper house by electing 61 candidates in the coming election.

Prime Minister Ohira and top men of the leadership group hold that gaining 61 seats would be enough of an achievement to merit being called a "victory" for the party because preventing the opposition from taking a combined majority of seats is the prime task for the LDP in the coming election. The Ohira leadership group members feel that an LDP victory in the election would strengthen the foundation of the Ohira administration and lead to the 70-year-old prime minister's reelection as party president in the biennial party presidential election scheduled for late this year.

It is precisely this reasoning of the leadership group that prompted the anti-leadership camp leaders to propose even higher election goals for the LDP. The severest standard has been set by former Prime Minister Miki, who says that any figure short of 70 seats would mean a loss for the LDP. Fukuda has set the goal at 66 and Nakasone at 64. The interesting thing is that the strictness of the criteria corresponds to the severity of criticism of Ohira by these three men.

Committee Chairmanships

Why Miki set 70 as the goal is because that is the number required for the LDP to control all the 16 standing committees in the upper house. In order to gain a majority in each of these committees and thus win the right to appoint an LDP member to the chairmanship of the committees, the LDP must win 136 seats. Since 66 LDP councillors will remain intact, the party needs to elect 70.

Fukuda has set 66 as the target figure for an LDP "victory" because that is the number of seats the LDP won in the previous upper house election in 1977 when Fukuda was prime minister. Any showing less than that cannot be called a victory in Fukuda's view.

The common reason the three ostensibly share in setting the goal so high is the recognition that even if the LDP should win 61 seats and manage to maintain the majority in the upper house in the coming election, the party would be almost certain to lose its majority in the 1983 election when the 66 LDP councillors will be vacating their seats. To make for an easier 1983 election, the party should win as many seats as possible in the coming election which will be staged without any major factors working against the LDP, and it is the task of the prime minister to accomplish this, they reason.



FOR OFFICIAL USE ONLY

However, Ohira and his followers have reason not to accept these high goals set by their rivals.

It is true that the coming election is not regarded to be a really tough one for the LDP in that less than half of the present LDP councillors are vacating their seats. On the other hand, the Socialists, Komeito and the Democratic Socialists are making progress in their talks on combining efforts to help one another's candidates. And popular support for the Ohira regime currently hovers around a low 30 percent and this rate is unlikely to rise dramatically by election time.

Winning Minimum Difficult

These factors indicate that winning even the minimum of 61 seats may be a difficult job. Members of the leadership group thus see it to be to their advantage to set the goal at a low level in view of the usual post-election wrangling for power within the party.

In a press conference in Utsunomiya last Sunday, Prime Minister Ohira announced that winning 63 seats was the LDP goal in an apparent move to party expected charges from the three antileadership group leaders that Ohira's goal was too low. The 63 seats pledged by Ohira are two more than the 61 so far proposed by leaders of his group but falls one short of 64, the majority for the 126 seats up for election in July.

A top leadership group figure said that the Ohira administration was more concerned with the immediate present than the future, thus implying where the leadership group's strategic emphasis lies.

Even if Ohira is reelected party president late this year, under party regulations he cannot seek a third term and must leave the presidency by the end of 1982. This means he will not be in power when the 1983 upper house election is held and therefore will not have to worry about an LDP majority in that election.

The debate over the win-loss demarcation line is likely to gain intensity in the LDP as the July election nears. An easy settlement is unlikely due to the struggle for supremacy between the leadership and anti-leadership camps after the upper house election.

COPYRIGHT: The Japan Times 1980

CSO: 4120

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

'JAPAN TIMES' VIEWS DEMOCRATIC SOCIALISTS' COALITION STRATEGY

OW030112 Tokyo THE JAPAN TIMES in English 2 Apr 80 p 12 OW

[Editorial: DSP's Drive for a Share of Power"]

[Text] The Democratic Socialist Party (DSP), according to the activity and policy programs announced last week for submission to a national convention in mid-April, proposes yet another modification in its strategy for developing a coalition to end the Liberal-Democratic monopoly on government.

At last year's convention, the moderate socialist group called for "a reformist-conservative alliance based on policy accords," which meant in effect a coalition linking the centrist parties and the Liberal-Democratic Party (LDP). This time the DSP says it seeks "a broad realignment of the political forces beyond the traditional, reformist-conservative line of demarcation."

The party avoids being specific about the make-up of the alliance it wants. But the apparent intention, as implied by the broad formulation, is for the centrist parties to pull together but also reach out for participation by the LDP as well as the Japan Socialist Party (JSP).

The DSP seems emboldened by, for one, the recent JSP-Komeito agreement on terms of joint participation in a coalition government in adopting the broadened scope of political vision. For another, the DSP is thinking about this summer's upper house election.

If the opposition parties are to deny the LDP a majority in that chamber, they must win in six or more single-member constituencies. Chances to achieve this feat depend on how successfully the JSP, Komeito and the DSP will work together in the strategic districts of their choice.

The caution shown by the DSP in not committing itself to either a centrist-conservative or tripartite alliance embracing the JSP is believed to reflect a desire to keep a margin of freedom and find out how political winds will blow in the future. Indeed, a party placed between larger parties on the ideological spectrum has no alternative but to remain attentive to the changing climate and retain an amount of maneuverability.

FOR OFFICIAL USE ONLY

In fact, it is unlikely that the centrist union of Komeito and DSP will grow into a force powerful enough to capture the government and run it on its own. Given the present realities, the LDP's loss of a majority in the upper house can come only when all the opposition parties--not just the centrist parties but also the JSP and perhaps the Japan Communist Party as well--make headway in the July poll.

If a gain by the middle-of-the-road parties is cancelled out by, for example, a deep cut in the JSP's parliamentary strength, the LDP might well continue to control more than a half of the 251 upper house seats. Such an outcome could also backfire and kill the momentum even for the growth of cooperation among the opposition parties.

The practical range of options for the DSP is, therefore, reduced to that of overcoming its still considerable animosity toward the JSP and encourage the JSP's progress in freeing itself of the residual grip of the Marxist-Leninist preoccupations. The only way to a reversal of the balance of power in the upper house lies in a fusion of the separate partnerships of Komeito and the DSP and of the JSP and Komeito.

If the DSP opts prematurely for casting its lot with the LDP, it would most probably be met with widespread voter disapproval. As shown by last year's convention, there is a strong sense of uneasiness among DSP members themselves about the idea of allying with the conservative party. It would seem that DSP leaders have more to gain than lose by working seriously now to coordinate policies with the JSP.

The moderate socialist group appears almost exclusively concerned with the outcome of the upper house election. True, the party's political influence has increased because it did well in last year's local polls and the general election of October. A major DSP victory in the July election could bring it closer to power. But the drive for participation in government must be accompanied by efforts of an equal intensity to expand and buttress its own party organization--an area where it is notably weak.

At present the party seems bent on first securing an access to power and then using it to expand its organizational strength. The party is, however, in need of first broadening its base of support beyond its traditional core clients among moderate trade unions and small businessmen. The DSP's single-minded quest for a share of power would have its own pitfalls.

COPYRIGHT: The Japan Times 1980

CSO: 4120

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

JAPAN SHOULD ESTABLISH 'INDEPENDENT FOOTING'

Tokyo SANKEI SHIMBUN in Japanese 21 Dec 79 p 11

[Article by Shoichi Saeki, Professor of the University of Tokyo]

[Text] "The Iranian and Korean situations are symbolic."

It is time for Japan to take an "independent footing"--perhaps this will become the characteristic of the coming decade in the eighties.

In fact, signs of it have already become clear.

For example, consider the hostage incident at the American Embassy in Iran, which has been drawing the attention of the world.

Iranian's action to occupy the embassy and to take the embassy staff as hostages is, without question, unforgivable. But so far other countries have not been able to help [the U.S.] and the only thing they can do is to "watch and wait."

How would it have been, had this incident occurred in the 1960's?

The United States would have taken much more dramatic steps, and next door the Soviet Union would have--taking advantage of the unstable situation--responded to that with military aid or intervention, and would have had no reason not to take other active measures.

Of course, there is no guarantee that the Iranian incident will not trigger a wider international dispute.

But so far it remains a local problem.

In other words, the surrounding nations are watching for an "independent" solution between the contending parties, Iran and the United States.

A more familiar case, the same could be said about the situation of the Korean Peninsula.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

The internal affairs of South Korea following the shooting incident of its president have been complex, and it is difficult to discern the actual state of affairs.

This brings to mind the pre-war period in our country, when the power struggle within the military played the leading, though hidden role in the course of events.

In any case, it is a tremendous shock to learn that in South Korea even the martial law commander has been arrested.

However, despite the [political] unrest, the peninsula as a whole appears calm.

Again, how would it have been had this shooting happened in the 60's, or even in the first half of the 70's?

We can easily imagine a major and frightening change, or dreadful conflict, would have developed.

Even in a more recent example, the collapse of South Vietnam in 1975, the relationship between South and North was strained to the breaking point.

Of course, we must not draw hasty conclusions.

We cannot be sure that there will not be any sudden turnabout.

Thus far, though, the surrounding countries and the superpowers are simply awaiting an "independent" solution to the South Korean situation.

"The prestige of the superpowers has suffered."

Are not these two examples likely to be symbolic means with which to forecast international relations in the upcoming 80's?

The superpowers, including the Soviet Union and the United States, seldom take direct actions.

They are maintaining self-control, and we admire this.

But in any case they no longer have enough influence to prevent local disturbances and disputes.

It seems that all they can do is simply avoid a head-on collision between themselves.

We should now consider our own country.

How is Japan going to deal with the trends which is ever leaning toward an "independent action," in effect, to have independent solution for its own account.

FOR OFFICIAL USE ONLY

In fact, if the United States had had more influence and prestige, the political upset in Korea would not have been extensive.

We can guess at least that the situation would have taken a very different form.

Fortunately, we are unlikely to have big domestic disputes or a military and/or revolutionary coup d'etat in our country for the present.

The discord at the renewal of the U.S.-Japan Security Pact which was signed in 1960, most likely, will not occur in the 80's.

However, new problems arise; for example, the military pressure from the north has been rising and its strength increasing, and more, this [new situation] reminds us that it may mean the arrival of the second "Black Ship."

What is the strategic purpose of the construction of strong military bases on islands such as Kunashiri or Etroff, which are right under the nose of Hokkaido and are Japan's inherent territories?

Is it a psychological tactic to intimidate us for having close ties with China?

Or is it the Far East version of the Russian experiment with missile bases in Cuba in the early 60's.

In other words, are they testing the attitude and strategy of the United States, which supports Japan, by nudging and jabbing us?

I, as an outsider, cannot understand it well.

"When On Earth Are We Going to Wake Up?"

In addition to the case of Soviet aggression, though local pressures and jostlings may increase in the future, there will be no reprieve. In those cases, no superpowers, and none of the surrounding nations, will help us.

We will have to deal with events by ourselves.

This will be characteristic of the 80's--the time to take "independent action."

This is not limited to military and defense issues.

I have a premonition that in the new decade the principle of "independent action" will confront us in dealing with almost all areas--diplomacy, economics, culture and the like.

Are we ready; are we prepared for this?

FOR OFFICIAL USE ONLY

Take a look at our domestic politics--the wretched intra-factional struggle surrounding LDP presidential post, the internal decay of the Japan Railway Construction Corporation and the KDD--these organizations, spoiled and slackened by the hot-house atmosphere by a long period of peace and prosperity, remind me of the last part of the Edo era.

Can we be satisfied and say, "it's alright" now while the difficult time [for Japan] to act independently and deal with the second "Blackship" has already arrived?

I wonder if we are not going to wake up [to the consequences] until we actually sight the more threatening "Blackship" approaches [to our land...]

COPYRIGHT: Sangyo Keizai Shimbunsha 1979

9532  
CSO: 4105

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

POLITICAL AND SOCIOLOGICAL

MEDIA ON JAPANESE THINK-TANK GROUPS

Tokyo NIHON KEIZAI SHIMBUN in Japanese 7 Jan 80 p 2

[Text] Defense Technology Center to be Established; Defense Technology Society that Aims at Promoting Research on Defense Technology

The majority of the members of this "think-tank" will be former Defense Agency and defense industry engineers recommended by the Japan Defense Agency (JDA). It will operate as a unique technology exchange center between the government and private sectors. Its specific aims are to 1) promote research development under requests from the Defense Agency Technical Research and Development Institute and the manufacturers, and 2) it will conduct research on the most sophisticated defense technology and submit proposals to government and industry. An inaugural meeting for the establishment of the center will be held around the 20th, and this will pave the way for its formal inauguration in April. As has been pointed out, Japan's defense technology research and development (R&D) is far behind of that found in the U.S. and European countries. The JDA hopes that "with the establishment of this new organization for technological exchange between the government and private sectors, and advanced technological research should make great strides."

Those participating in the organization will be the government, the Federation of Economic Organizations, four industrial organizations which are related to the defense industry, including the Association of Arms Manufacturers, and financial organizations, including such banks as the Dai'ichi Kanyu. Added to this will be former technology specialists in the Defense Agency Technical Research and Development Institute, and engineers in the three branches of the Self-Defense Forces. The non-profit civil organization will fund the total amount of 35 million yen, and the organization will be presented as in the form of a private incorporated foundation.

Specialists from various fields such as in electronics and torpedoes will participate as members. In addition to President Yasushi Hori (former director of the Defense Agency Technical Research and Development Institute), who gained fame developing the oxygen torpedo as a technical officer in the old Imperial Navy, the honorary chairman of the board will be Soichiro Honda

FOR OFFICIAL USE ONLY



FOR OFFICIAL USE ONLY

(chief advisor for Honda Motor Co., Ltd.). Special advisor will be Masaru Ibuka (honorary chairman of the board of Sony), and they in turn will call upon pioneering talent in technological development.

The actual state of the R&D on defense technology has so far been limited to cases in which it has been either carried out by the Defense Agency Technical Research and Development Institute itself or the R&D has been completed by manufacturers that provided technical services to JDA on contract. However, these arrangements will not promote the technological exchange between government and private sectors, and it will not contribute toward achieving technological research and development. The establishment of this organization is thus underway for government, in cooperation with the private sector to achieve technological research and development. The JDA will be able not only to put former engineers' skill to use again but also they can make use of it as one of their re-hiring measures.

Together with carrying out research and development on contracts from the Defense Agency Technical Research and Development Institute and the manufacturers, there is a plan to deal with the R&D on armaments which the JDA considers difficult to seriously carry out within its organization. For example, they are trying to promote research on sophisticated weapons such as laser weapons and reconnaissance satellites. However, the government could easily become a target of criticism from the opposition parties against its involvement with these weapons, even if it's a matter of research and development only. And the JDA believes that "by moving the location of weapons R&D [office], the Agency may be able to avoid becoming a target of criticism."

As this will be the only think-tank in Japan dealing with defense technology, those in the Defense Agency are contemplating that in the future, when the Association is officially established, they can set up an arrangement so that active JDA engineers can be sent to this "think-tank" on rotation. They also consider seeking the participation of academicians, and some day they hope to form one large "think-tank" made up of members from the Defense Agency, the private sectors, and the academic circle.

COPYRIGHT: Nihon Keizai Shimbunsha 1980

9530  
CSO: 4105

FOR OFFICIAL USE ONLY

MILITARY

DEFENSE EXPENDITURES DISCUSSED

Tokyo THE DAILY YOMIURI in English 23 Mar 80 p 2

[Editorial: "Japan's Defense Spending"]

[Text]

US Defense Secretary Harold Brown and other Carter administration officials, in their talks with Foreign Minister Okita, have urged Japan to steadily and significantly increase its defense expenditure. They especially called for "significant" rather than "steady" increase.

Okita reportedly emphasized Japan's "steady" efforts toward that purpose, saying that it would be difficult for Japan to raise its defense spending to one percent of its gross national product (GNP) in a short period of time.

Tentative calculations show that the one percent level in three years would raise Japan's defense spending by ¥1,000 billion, an increase which is impossible to achieve under the present deficit-ridden financial situation of the government.

There is a growing fear that the defense spending question may turn into a point of discord between the two countries. Since the Soviet incursion into Afghanistan, the US has been urging Japan in a stronger tone than ever to increase its defense capability.

Moreover, some US officials have asked Japan to join the US Pacific reconnaissance fleet. There has also been a suggestion that Japan build two aircraft carriers and loan them to the US. In a nutshell, Japan is being asked to spend more on defense.

**Emerging Pattern Of US Demands**

A pattern has been in the making between the US and Japan in which the US presses Japan on a certain issue and Japan reluctantly complies with the demand. But the national defense issue cannot be placed on the same level as the trade issues. Also,

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Japan is restricted by the constitution and the fundamental policy when it comes to defense. And a sole increase in defense spending will never signify a genuine increase in defense capability without national consensus.

We can understand the US irritation with the growing international tension. But a quick-tempered demand on Japan will rather have an adverse effect.

Japan knows what it can do and what it cannot. It is possible, given enough time, for Japan to increase its defense capability and strengthen its naval and air power which will help maintain Japan's security in an emergency when the US Seventh Fleet is dispatched to another part of the world such as the Middle East.

#### **Japan's Fundamental Policy**

But we should not forget Japan's fundamental policy of never becoming a military power possessing nuclear weapons. This view was supported in a recent Yomiuri Shimbun survey in which half the pollees expressed a negative attitude toward strengthening the nation's defense capability.

We, however, have no intention of stressing Japan's "special circumstance and stance" and avoid contributing to the world peace. There are other means than large guns that contribute to peace.

US Ambassador Mike Mansfield and others who know Japan well rather appreciate its defense effort and hope that it will increase its aid to developing countries. This is what Japan should do.

Nonmilitary aid to Pakistan and other countries lying on the fringes of strife-ridden areas will work more effectively in securing peace than bullets. Japan should naturally cooperate with the US as a member of the Free World but each country has its own role to play.

COPYRIGHT: The Daily Yomiuri 1980

CSO: 4120

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

ECONOMIC

REPORT ON TRADE STRATEGY IN 1980'S DISCUSSED

Tokyo MAINICHI DAILY NEWS in English 24 Mar 80 p 2

[Editorial]

[Text]

The Industrial Structure Council has submitted a report on Japan's trade strategy in the 1980s to the Ministry of International Trade and Industry. We believe the council has accurate basic perceptions and a correct direction in compiling the report entitled: "International Trade and Industrial Vision Over the 1980s."

The enthusiastic vision has to face two big obstacles in guiding Japan's economic society in a desirable direction. The first will be related to administrative organizations and the second, the fiscal burden. We do not believe the council, an advisory organ of the ministry, can blueprint the economic society of Japan during the coming ten years only through the eyes of trading administration officials. We highly appreciate the officials' challenge in which they went beyond their own bureaucratic territories to compile the report. At the same time, however, the report contains many proposals which could not be implemented without coordination among cabinet ministers.

The basic perception of the "vision" is to maintain and expand civilian vitality while limiting governmental intervention to the minimum. Still, the prerequisite for the implementation of the proposals is drastic fiscal investment. We hope the "vision" will be adjusted by cabinet ministers and put into effect step by step.

The vision has three aims. First, it refers to Japan's international contribution as an economic

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

power. It points out that Japan, with a population of only three percent of the world's, is now a "ten percent nation" in economic strength. It can no longer ignore its own responsibility to make some contribution to the world.

The report says Japan must set an index for overall economic cooperation, including official governmental assistance, export credit, direct investment and imports of finished products from developing countries. The ratio of Japan's aid to the gross national product (GNP) will be expanded from the current 1.6 percent to 3 percent by the end of the 1980s, or six times in nominal terms.

Second, Japan must deal successfully with its status as a country endowed with few natural resources. The report envisions Japan having to reduce dependence on imported oil energy from the present 75 percent to 50 percent in 1990. For that purpose, Japan must innovate technology to substitute or conserve energy through necessary investment. Moreover, Japan must create its own technology in this respect. The achievements in the field will provide essential bargaining power for Japan, according to the report.

To complete such technological development systems, the total expenditures for technological development must be increased from the present 1.7 percent of GNP to 2.5 percent in the mid-'80s, or the present highest standard attained by the United States and some European countries. The figure must be expanded to 3 percent by the end of the '80s.

Third, the report calls for the coexistence of vitality and latitude. To achieve the first and second objectives, social vitality must be maintained. With the advent of the so-called advanced age society, requests will become stronger for improved social welfare and expanded life space. The report calls for drastic measures to improve housing, land and social overhead capital related with daily life.

The Japanese economic society has experienced periods of reconstruction in the 1950s, development in

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

the 1980s and adaptation in the 1970s. It must contribute to the world economic society and also share due responsibility for that purpose in the 1980s. At the same time, the Japanese economic society has its own domestic problems to solve.

The removal of walls existing between administrative officials and adjustment of demand from the new society and financial burdens are major such problems. As long as walls exist, the "vision" can not be realized.

COPYRIGHT: The Mainichi Daily News 1980

CSO: 4120

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

ECONOMIC

'JAPAN TIMES' ON RECURRING JAPAN-U.S. TRADE DISPUTE

OW040358 Tokyo THE JAPAN TIMES in English 3 Apr 80 p 12 OW

[Editorial: "Opening Up a 'Closed Market'"]

[Text] In the midst of recurring trade disputes the trade imbalance between Japan and the United States is likely to grow worse this year. According to an estimate by a U.S. Congressional trade committee. For instance. The U.S. deficit with Japan may reach \$16 billion or almost double last year's \$8.6 billion.

Japanese exports to the U.S. continue to expand aided in part by the depreciation of the yen. U.S. demand for imports, such as cars, remains strong. On the other hand, a moderation in Japan's internal demand and the continuing fall of the yen are contributing to a slowdown in the imports from the U.S.

There are more fundamental reasons. Japan's export products, as exemplified by autos and electronics, remain internationally competitive. But the relative competitiveness of certain U.S. export products has declined. The trade structures of the two countries are basically different, making Japan export-oriented and the U.S. import-oriented. There is also the problem of Japanese "non-tariff barriers," real or imagined, that tend to limit the access of American (and other foreign) goods to the Japanese market.

Whatever the reasons, a trade imbalance as large as, say, \$16 billion would be undesirable for both nations. In the eyes of Americans, a deficit of this order would be simply intolerable. Japan needs to promote foreign sales because it is expected to continue running a very large current account deficit. But generating such a huge surplus in trade with the U.S. would run counter to our policy of achieving a better equilibrium in Japan-U.S. trade.

A sharply increased trade gap could again be blamed on the "insularity" of the Japanese market, as it was as recently as in 1978 when the U.S. registered a record \$11.6 billion deficit. Although Japan today is, by and large,

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

one of the most liberalized markets, at least institutionally. Americans would be led to believe that ours is after all a "closed" market in practice.

In the area of tariffs, the Japanese market is generally more open than those of the U.S. and West European nations. The average of import duties for industrial goods has been reduced to only 3 percent in Japan as a result of the multilateral trade negotiations known as the Tokyo round. Import quotas are maintained on "sensitive" products in a handful of categories, notably agriculture. But other countries are doing no better in such areas.

Americans--and foreigners generally, for that matter--blame non-tariff barriers on the "closed" nature of the Japanese market. If the trade gap grows conspicuously--in a U.S. election year at that--Japan would certainly come under renewed pressure for more imports of U.S. goods. In fact, this country is already being asked to buy more cars, more telecommunications equipment, more agricultural produce, and more tobacco, for example.

Japan is placed in a position of having to produce tangible results in terms of trade liberalization. A further opening of the Japanese market, however, should require efforts on the part of both Japan and exporting countries. The case of Japan-U.S. auto trade provides a good example of this.

Last year, Japan exported about 2 million passenger cars and trucks to the U.S. While its imports from that country reached only 20,000 cars. The problem, on Japan's side, is structural and psychological. It is structural because the auto distribution system in this country is designed traditionally to handle limited numbers of foreign cars for use by corporations and wealthy individuals, and psychological because Japanese consumers as well as car importers and dealers are accustomed to the notion that imported cars are an expensive "luxury."

The tiny share which American (and other foreign) cars hold in the Japanese market also reflects a more important fact--that U.S. models are not designed to meet the specific needs and preferences of ordinary Japanese drivers. The price of U.S.-made cars would be substantially reduced if they were tailored to Japanese requirements. Thus making it unnecessary to make costly mechanical and other adjustments in Japan.

Nevertheless, one can expect that sales of foreign cars will gradually expand in the years ahead, as Japan's total auto imports increased steadily in the past few years, thanks in part to the abolition of the import duty. Japan imported about 40,000 cars in 1977, 50,000 in 1978 and 60,000 in 1979.

A further liberalization of the Japanese market requires a long-term effort, as does the development of a more stabilized pattern of trade between Japan and the U.S. if the trade imbalance should grow rapidly this year. It should be considered a temporary aberration. It must not be allowed to blur the fact that progress however slow, is being made in the effort to open up the Japanese market.

COPYRIGHT: The Japan Times 1980

CSO: 4120

27

FOR OFFICIAL USE ONLY



FOR OFFICIAL USE ONLY

ECONOMIC

COOPERATION SOUGHT IN PROPOSED 'SECOND PANAMA CANAL' PROJECT

Tokyo THE DAILY YOMIURI in English 24 Mar 80 p 2

[Editorial: "Japan and 2nd Panama Canal"]

[Text]

In these days of gloomy economic news, it won't be amiss to think of a grandiose story such as construction of a second Panama Canal.

It is evident that the present Panama Canal cannot fulfill the needs of our times anymore. Sooner or later a new Panama Canal of a sea-level type and large enough to accommodate vessels of several hundred thousand tons will have to be constructed.

The visit to Japan of Panamanian President Aristides Rojo, who arrived in Tokyo Sunday for a series of talks with Japanese leaders, is mainly aimed at seeking Japan's cooperation in the ambitious second Panama Canal project.

Fundamentally, the Japanese Government should take a positive stance toward realizing the new canal project because as much as one-third of cargo being carried by vessels passing through the existing Panama Canal is either from or to Japan.

The projected second Panama Canal, if constructed, would enable raw materials like Venezuelan oil and Brazilian iron ore to be transported to Japan in larger quantities and in shorter time.

#### **Cornerstone Of Future Ties**

Considering that Panama develops into a big financial and trading center with the future development of that country's Colon free trade zone, cooperation in the second Panama Canal project can serve as a cornerstone of Japan's future ties with all the central and south American nations.

A bigger second Panama Canal would also enable the US to quickly move its fleets from the Pacific to Atlantic and vice versa thus furthering security of the Far East.

In the technological aspect, Japan has won high international reputation in canal construction as seen

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

from its technical cooperation in the widening of the Suez Canal. Japan is said to be the right country to help build the planned second Panama Canal.

However, there are many hurdles that need to be cleared before work on the colossal project can be undertaken. The project is estimated to cost more than \$10 billion and require over 10 years for completion.

Japan-Panama talks on the feasibility of the project are still at a rudimentary stage. An estimated ¥5 million will be needed to carry out a preliminary survey which will involve ecological effects of the first sea-level canal linking the Pacific and Atlantic.

#### **Discard Profit-Loss Theory**

Looking at the huge amount of money needed to carry out the project, many Japanese enterprises may express hesitation because of the present stringent business conditions. But we must remember that the projected second Panama Canal will serve the whole world, and Japan, if it undertakes the construction, will leave its mark on world history. Japan, therefore, should not think of profit and loss in this case.

While pursuing the project, a close cooperation with the US is indispensable because of American people's historically strong sense of affection for the Panama Canal. Also due attention should be paid to possible jealousy from countries adjoining Panama.

In addition, it is important to further deepen the friendly relations with Panama, a country still unfamiliar to many Japanese.

The visiting Panamanian president is expected to seek Japan's cooperation in his country's economic development and social welfare plans. Such requests for Japanese assistance are a proof of increasing attention being paid by foreign countries to Japan's growing role in the international community.

COPYRIGHT: The Daily Yomiuri 1980

CSO: 4120

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

U.S.-JAPAN: FIERCE COMPETITION SETS FORTH IN SEMICONDUCTOR FIELD

Tokyo NIHON KEIZAI SHIMBUN in Japanese 17 Jan 80 p 1

[Text] "The United States is barely maintaining its supremacy in advanced technological industries, such as those of computers, semiconductors, etc, but the Japanese are eagerly waiting for an opportunity to move into these fields. In their typical fashion, the Japanese plan to make their move as 'Japan, Inc' with the government and industrial circles forming a united entity."

We obtained a confidential document beginning with the aforementioned statement. It was titled, "Why the American industries were demoted to the status of mere sales enterprises." This document was stamped "confidential handling" and distributed last year by the vice president of a leading minicomputer maker to concerned government authorities and a strictly limited number of influential Congressional representatives.

The Confidential Document

"The aim of the Japanese is clear. Yet, the American government and industrial community do not understand it at all. If they lose to Japan in this field, the American industries will probably receive a devastating blow." The Japanese absorb, in rapid succession, the new technologies developed by the United States and instantaneously produce better quality products than the Americans. If this situation continues, American enterprises will simply become sales companies to import Japanese products. Thus did the classified document gravely warn of the Japanese threat and plead for the necessity of countermeasures.

"Therefore, the following is proposed: American enterprises which import and sell Japanese products of advanced technological types, such as semiconductors, should be required to export to Japan, American goods such as farm products, in equal amount."

The U.S. Congress has not yet shown any indication of officially taking up this proposal. It is a fact, however, that such strong anti-Japanese arguments are spreading rapidly within American industrial circles.

FOR OFFICIAL USE ONLY

Actually, in mid-October of last year, L. Sebin, [phonetic] president of the Semiconductor Industry Association, testified before a public hearing of the joint Congressional Economic Committee that the American semiconductor market had been thrown into a big confusion by the great onslaught of the Japanese enterprises.

"The Japanese makers have already taken over 42 percent of the American market in the important semiconductor field of 16 kilo-bit RAM which is used in the main memory unit of computers...if this continues, the semiconductor industries will suffer the same fate in the fields of color TV, steel and automobiles."

The Japanese semiconductor firms had had a vague notion that this day was coming. "Without doubt, the United States would demand that Japan restrain its exports to America and switch to on-site production in the United States." Believing this, the Nippon Electric Company, Ltd. and Hitachi, Ltd were the first to start semiconductor production in the United States. Toshiba Corporation and Mitsubishi Electric Corporation are expected to switch to production in the United States within this year.

President Sebin has made a proposal, however, to the joint Congressional Economic Committee that will completely nullify these "preventive measures" taken by the Japanese side.

[He is advocating that] "There should be a surcharge placed on Japanese semiconductors produced in the United States as well as on semiconductors imported from Japan."

Computers, semiconductors and communications equipment, which became an issue in the "open-door" materiel procurement policy of the Nippon Telegraph and Telephone Public Corporation...these advanced technological industries, based on electronics, are the "last stronghold" of the American industrial circles. America has been overtaken by Japan and West Germany in steel, home appliances, automobiles, etc. In the [electronics] field, however, the "United States is obviously the leader, at present, and will continue to lead the world." (Words of H. D. Toombs, vice president of Texas Instruments Inc). In other words, it is the "sacred ground" for the Americans.

#### Starvation Tactics Against Advanced Technologies

The "anti-Japanese feelings: of the American industrial circles have been inflamed probably because the Americans have begun to lose their confidence. In fact, from the Japanese standpoint, much of what the Americans are advocating, with regard to advanced technologies, appear to be one-sided. For example, as one of the reasons for seeking strong anti-Japanese measures, the American industrial circles claim that the "The Japanese are receiving government aid to develop LSI (large scale integration). However, even in the United States, calling it the 'VSHI (very high speed integration) Development Plan,' the Defense Department is granting 200 million dollars (approximately 47 billion yen) as developed capital to the semiconductor industries during the 6-year period preceding 1984 to develop 'very large scale integration.'"

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

"The U.S.-Japan technological warfare has already begun." J. Varuch, Assistant Secretary for Science and Technology, in the Commerce Department has so clearly stated. The U.S.-Japan economic frictions of the 1980's are not confined simply to trade problems but are on the verge of spreading in the form of technological warfare in the advanced fields. At the annual general meeting of the U.S. Electronics Industries [Machinery] Association, which opened in Florida on the 14th, representative Asuke [phonetic] of the U.S. [Office of the Special Representative for Trade Negotiations] was invited and it was decided to explain the Japanese offensive in the advanced technological fields and to obtain relief measures from the U.S. Federal government and Congress.

"Unlike the textile and steel industries, unemployment cannot be that high in this field. Why is the United States so concerned about this matter?" Expressing this puzzlement is Foreign Ministry counsellor Nobuhiko Ushiba, chairman of the Japanese representation on the [U.S.-Japan Wise Men Council] (U.S.-Japan economic affairs group), which was formed to ease the U.S.-Japan economic frictions. That the United States and Japan mutually expect frictions in advanced technologies to become a major issue in the future is underscored by the inclusion, as members of the [Wise Men Council] of Sony Corporation chairman, Akio Morita, who is an expert in this field, and of E. [W.] Spencer, chairman of Honeywell Inc, one of the large U.S. computer manufacturers.

The American strategy against Japan, with regard to advanced technologies, is not simply to restrict imports as in the past but to get at the source of the competitive power of Japanese products. The strategy is to restrict export to Japan of advanced technologies, i.e., starvation tactics.

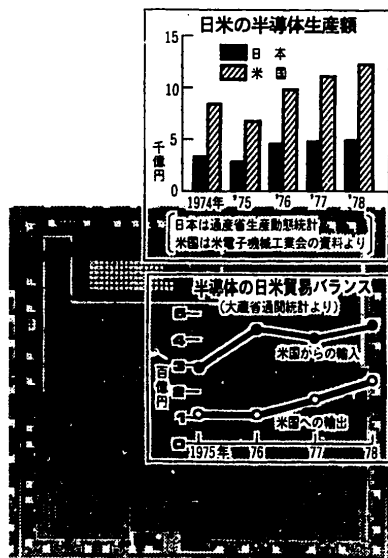
#### Liberation Through Reciprocity

"The United States too freely provided foreign countries with new technologies. Japan owes its semiconductor industry of today to the technology obtained from the United States." (Statement of R. [N.] Noyce, vice chairman of Intel Corporation, a maker of semiconductors). Labor unions also claim that the technology export of the United States invited a flood of [foreign] products and contributed to the high unemployment rate.

Fortunately, the American government "has no intentions, yet, of taking the extreme step" (according to Assistant Secretary Baruch) and is insisting only that markets be liberated for advanced, technological industries. Japanese entrepreneurs are stating, however, that "if you try to buy new technology from Americans, they are now asking what kind of technology they can get in return." Word is spreading that "the time has passed when you could buy any amount of new technology you wanted as long as you paid for it. You must develop your own technology and import foreign technology in exchange for it." (Statement of [Kojiro Ozu], patent department chief of Toshiba Corporation.)

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY



Key:

1. Semiconductor production sum of Japan and United States
2. Japan
3. United States
4. 100 billion yen
5. Year
6. Japanese figures based on production trend statistics of the Ministry of International Trade and Industry
7. U.S.-Japan semiconductor trade balance (based on customs clearance statistics of the Finance Ministry)
8. Imports from the United States
9. Exports to the United States
10. 10 billion yen
11. Year
12. Made-in-Japan semiconductors are now a threat to the United States (above is an enlarged photo of the integrated circuit)

The Ministry of International Trade and Industry has only recently begun to consider the prospect of publicly revealing the LSI (very large-scale integration) technology to foreign enterprises because of its concern for this newly developing situation. The market liberation of communications equipment is probably a matter of time. To avoid escalation of U.S.-Japan technological warfare, Japan must share its technologies and market on the principle of reciprocity" and only then, should Japan boldly advocate its claims to the U.S. side.: (Statement made by Ushiba).

COPYRIGHT: Nihon Keizai Shimbunsha 1980

9134

CSO: 8029/0749

33

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

JAPAN-U.S.-FRG COOPERATION IN AUTO DEVELOPMENT SOUGHT

Tokyo NIKKAN KOGYO SHIMBUN in Japanese 28 Feb 80 p 2

[Editorial]

[Text] Future Automobile Development and Automobile Industry

A request has been tendered through the Japan Automobile Industry Association (President Eiji Toyota) to the Japanese automobile makers from the German Marshall Fund of the United States to the effect that the Japanese makers bear a fraction of the costs for research and development on the "automobile of the future." This fund has made a similar request to the automobile makers of the United States and Europe. If there is accord from all involved, there will be joint Japan-U.S.-FRG funding of research and development on the automobile of the future. At this time, there is continual criticism being directed by the Western world against the Japanese makers as is evident from the present friction between Japanese and American automobile makers, and Japan must examine this present request very carefully.

The German Marshall Fund was established by the United States directly after the end of World War II to provide food and supplies for West German recovery just as was provided Japan, and its central objective was to provide aid. Now according to the explanation by the Japanese automobile makers, the aid money for the West Germans was returned, and this fund proposes to use this money in an effective manner by taking up research and development of the automobile of the future. The actual research and development will be conducted at the Massachusetts Institute of Technology in the United States at a total expenditure of \$3.55 million of which this fund will advance 20 percent and the remaining 80 percent will be acquired from Japanese, American and European automobile makers.

At the present time, only the general outlines have been drawn up, and the specific details seem to be but blank sheets of paper. Because of this situation, this fund requested the International Automobile Industry (BPICA, headquarters in Paris) at its company committee meeting to take up this subject, and the specific plans are now being laid out. At the present time, a number of diverse research and development themes such as fuel, pollution and safety problems are being considered. Today, there is an

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

urgent need for the development of new energy, and it is thought that research and development of automobiles using substitute energy sources such as alcohol or hydrogen is receiving major attention.

Should this joint program be initiated, this research and development will be on subjects common to the Japanese and Western world automobile makers, and it would seem that the Japanese automobile industry should enter into all out participation. At the present time, the Japanese Automobile Industrial Association is awaiting the conclusions of the committee reports of the International Automobile Industry before it will take up its stance. On the other hand, Japan which has but recently entered the ranks of the leading automobile makers in the world should be able to readily see the great expectations directed in its direction by the automobile makers of the Western world.

Consequently, the automobile makers of Japan should also think along the lines of its international position and role and come forth with a forward looking conclusion.



Quint TE

COPYRIGHT: Nikkan Kogyo Shimbunsha 1980

2267

CSO: 8129/0826

FOR OFFICIAL USE ONLY



FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

JAPAN AUTO MAKERS BUYING ROBOTS IN QUANTITY

Tokyo NIKKEI SANGYO SHIMBUN in Japanese 22 Feb 80 p 1

[Text] (Nagoya) Toyota Motor Company, Ltd. decided on 21 February to adopt a policy of acquiring 720 robots over the course of the next 3 years in order to rationalize its production facilities and increase production. It is expected that the entire order will go to Kawasaki Heavy Industries, Ltd. which is the top maker of industrial robots, and a formal order for about 220 units is expected this year. Automobile makers both domestic and abroad are pushing construction of new facilities and promoting a high degree of plant renovation to gird themselves for the international competition in the compact car area. In particular, GM (General Motors) of the United States is said to have installed a large number of industrial robots in its strategic Oklahoma plant, and the industrial robot is drawing the spotlight as an item to be placed side by side with fabrication machinery in the competition of facilities between American and Japanese automobile makers. With this latest order Toyota will surpass GM and become the world's leading user of robots, and it is expected to amass a robot line of more than 900 units in a few years.

The robot to be introduced by Toyota is the multirobot system "6000" which Kawasaki Heavy Industry developed by its own effort. It is a multiple jointed robot and features an arm which can enter very narrow openings, and this unit is suitable for installation on spot welding lines. The cost per unit is one which is presently under final negotiation between Toyota and Kawasaki, but it is expected to cost an average of 8 million yen per unit making Toyota's total order approach the 5.5 billion yen level.

Toyota plans to install about 200 of the 220 robots on order this year in the assembly line of its Tahara No 2 Plant now under construction and expected to be completed in the spring of 1981. The Tahara No 2 Plant will "be the latest plant which will incorporate all the technology and knowhow of Toyota." (President Eiji Toyota). It will be Toyota's strategic plant for export of compact automobiles, and the installation of 200 robots in a single plant will be the first event of its kind in the world.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

In addition, it is planned to order 200 units during 1980 and 300 units in 1981, and these are expected to be used for renovation of the Takaoka, Motomachi and Tsutsumi plants, and it is planned to convert most of the welding lines to ones using robots.

Toyota is already using about 200 robots in its present welding lines, and this turn to more active use of these robots has, as its background, the ever intensifying competition in the area of compact automobiles between Japan and the United States. For example, the Oklahoma plant of GM is already said to be outstripping Toyota and Nissan, and the Japanese makers dream of "productive superiority" is being reflected in the rush toward new plant construction.

Toyota is revising its policy and expects to increase its outlays for facilities to a level 50 percent higher than the previous year to 180 billion yen and "it will maintain this level of expenditure for several years" (President Shohachi Hanai), and it is completely restructuring its technology development and facilities renovation areas. The introduction of robots is associated with the naturally resulting conservation of labor, but Toyota also plans to exploit this introduction to convert its assembly lines from sole use lines to general use lines which represents a forward looking facilities strategy on the part of Toyota.

Toyota plans to use this Tahara No 2 Plant as the first plant in which the production mode of the past in which one line produced but one type of automobile will be replaced by one line producing 2-3 types of cars on parallel manner. As long as the proper plans are placed in the computer, the robot will automatically adjust to changes in car type thereby enabling a single line to be adapted to general use. At the same time, the robot can easily adapt to changes in production volume. In this manner, the versatility given these lines will enable greater flexibility in adapting to the whims of the compact car market which are very difficult to predict.

GM with its roughly 500 robots heads the list of robot users in the automobile world while in Japan Nissan has about 300 units on line, and the use of robots has been spearheaded by the giant producers. The news that Toyota will introduce this large number of robots is being followed by Toyo Kogyo introducing some 50 units and Isuzu Motors also planning to turn to the use of robots. In other words, a robot boom is in the offing.

COPYRIGHT: Nihon Keizai Shimbunsha 1980

2267  
CSO: 8129/0826

FOR OFFICIAL USE ONLY

SCIENCE AND TECHNOLOGY

EXPERT DISCUSSES FUTURE OF TIDAL WAVE POWER PLANT

Tokyo NIKKEI BUSINESS in Japanese 25 Feb 80 pp 129-131

[Interview with Yoshio Masuda, director of the Applied Marine Science and Technology Research Division, Japan Marine Science and Technology Center, Science and Technology Agency, by Koichi Shiraishi, assistant editor in chief, NIKKEI BUSINESS--date and place not given]

[Text] In the past, man has hardly achieved any results in attempting to utilize the energy of the oceans which occupy the greater part of the earth.

However, tidal wave power generation technology which utilizes the energy of waves was completed in Japan before any other nation in the world, as a power source for navigational aids and unattended lighthouses. An experimental ship, the "Kaimei" which will eventually lead to large-scale power generation, has been steadily producing ocean experimental results.

Our dream is to have a fleet of tidal wave power plant ships floating on the Pacific Ocean in the future, and to supply all the electrical energy needed in Japan by extracting uranium from the ocean.

Already Practicalized to Generate Electricity Independently for Navigational Aids

Shiraishi: Various methods are being explored to develop energy which can be a substitute for oil. I understand that extensive research efforts are thriving, for example, in extracting alcohol from biomass, that is, plant resources, and in growing trees which produce oil. When did the attempt to obtain electricity from the power of waves, the so-called tidal wave power generation, start to appear?

Masuda: The history of natural tidal wave utilization can be, in fact, traceable back into the 19th century. There remains on record that in Bordeaux, famous for its wine, in France, electricity was generated by spinning an air turbine using air compressed by the force of waves through a hole made on a quay. Also, in Japan, there are the remains of a tidal wave power generation experiment conducted by a German engineer at

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Inubo Point, Chiba Prefecture. The history of tidal wave power generation is old, and the truth of the matter is that this technology has been recently brought to light for reevaluation due to the serious energy problems.

Shiraishi: I hear that you started tidal wave research quite a long time ago, Mr Masuda?

Masuda: The first experiment was conducted in 1947. The majority of my generation was greatly shocked by the loss of the war, and I, also, needed to find the next objective for which I live. I thought of extracting energy from the waves of the sea. After conducting experiments using various systems, the currently used air turbine system has survived the tests.

Shiraishi: The air turbine system you have mentioned is the same system once used in Bordeaux. I hear that in Japan air turbine tidal wave power generation has already been practicalized in some fields.

Masuda: That is true. One is likely to think it is only a dream to generate electricity using tidal waves, but it is actually used to generate electricity independently for navigational aids. The Marine Safety Agency is greatly interested in this technology. Approximately 1,000 plant ships, including those exported, have been operated to date, and all the equipment has worked without failures for the last 7 years. I, also, made this navigational aid by the "air turbine system."

Very Simple Principle; Air Compressed by Waves Spins Turbine

Shiraishi: Could you explain briefly the "Air Turbine System?"

Masuda: The principle is very simple. Natural ocean waves are too slow to be used as a source of energy. Therefore, in this system, we use the force of the air compressed by the power of waves to spin a turbine generator (see drawings below). Waves originate from wind, and the power of the waves is converted once more to wind to spin the turbine, according to this system. Currently, the Marine Science and Technology Center is conducting an experiment in the ocean using a plant ship, the "Kaimei," built for the experiment, as a link in a chain of research pursued by the IEA (International Energy Agency). The size of the "Kaimei" is almost the same as a 2,000-ton class ship, 80 meters in length and 12 meters in width. There are 22 air chambers with a hole facing the bottom, and eight air turbines are installed. Soon the number of the turbines will be increased to nine units (see picture of the "Kaimei" on the previous page).

Shiraishi: How much is the power output of the air turbine loaded on the "Kaimei?"

Masuda: It depends on the size of the waves, but the peak value during a great storm is, for example, 150kw/unit. This figure is expected to be

FOR OFFICIAL USE ONLY

raised to 300kw by the end of this year. Speaking of the average, the power generation capacity is roughly 50 kw.

Shiraishi: That is translated to be an average of 450kw power generation capacity when loading nine turbines on the "Kaimei." Is it because the waves in the ocean were specially rough that the sea off the coast of Yura, Tsuruoka city, Yamagata Prefecture, was chosen as an experimental site?"

Masuda: No, it is not. The size of the waves in the Japan Sea along the Japanese coast facing the Asian Continent is practically the same at any point. Tsuruoka city was chosen because the fishery guild of that community welcomed our experiment. To be frank with you, the "Kaimei" is effective as a fish reef, and fish either gather or stop around the ship. We can see squid and red snapper gathering from the deck of the "Kaimei." It is like an aquarium (laugh). At this time of the year, about 10 or so fishing boats fish near the "Kaimei." Practically any buoy has a fish gathering effect, and the local fishermen are very much pleased by the presence of the "Kaimei."

Why Not Utilize the Abundant Resource? Cost Still Higher Than Thermo-electric Power Generation

Shiraishi: When thinking of large-scale tidal wave power generation, it really must be an important condition to have cooperative and friendly relations with the local fishery cooperative union.

Masuda: Suppose the experiment had an adverse effect on the fishery, it would never be carried out, and eventually the practicalization would hardly be feasible. In this light, the tidal wave power plant ship seems to have favorable conditions.

I believe the superiority of the tidal wave power generation technology lies in its vast scope of applicability. Above all, two-thirds of the earth is ocean, and the largest energy in the ocean is waves. According to a survey by the Marine Safety Agency, the total coastal length of Japan is 13,000km, and a yearly average of approximately 1 trillion kw waves beats upon the shores of Japan. If we can utilize some fraction of this force, energy problems in Japan will be easily dissolved.

Shiraishi: By the way, at the beginning of the year, electricity by the tidal wave power generation was transmitted from the experimental plant ship, the "Kaimei," to Tohoku Electric Power Company. I hear it was the first time in the world that power generated by tidal waves was transmitted through a general power cable. Was this experiment successful?

Masuda: Yes, I should say so. Only one air turbine unit of the tidal wave power generation was connected to the Tohoku Electric Power Company, and furthermore, under the condition of less than 170kw. We have successfully transmitted an average of 30kw of power. The 30kw only amounts to enough power to light 1,000 30w fluorescent lamps, but what is important

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

is the endorsement from the Tohoku Electric Power Company saying, "perfectly safe power to be transmitted." It seems we have approached one step closer to a large-scale tidal wave power generation.

Shiraishi: After all, what is the cost of the tidal wave power generation?

Masuda: Summing up costs from the initial water tank experiment to the construction expense of the "Kaimei," approximately 1 billion yen has been spent for research and development expenses. Taking into consideration the refundment of these expenses, it is computed that about 200 yen is the cost to produce a 1 kw/h power.

Shiraishi: Since it costs from more than 10 yen to below 20 yen to produce the same amount of power by thermoelectric power generation, this system is certainly 10 times more expensive. I am surprised by the high cost....

Masuda: The cost can be reduced to 50-60 yen/kw very soon. Frankly speaking, although I mentioned before that the length of the "Kaimei" is 80 meters, this figure was our oversight in estimation. Now, it seems that the body of a ship measuring about 100 meters in length conducts most efficiently the energy of waves to air. We miscalculated the wavelength of the waves in the Japan Sea to be an average of 80 meters, but, in reality, we will not lose any wave energy if the ship is constructed adjusting to the wavelength of a rough wave of approximately 100 meters. Additionally, the cost will be reduced to about 20 yen/kw by devising the design to improve the air turbine power generator, for instance, by changing the double valve system to a four valve system.

Solution to Controlling the Power Deficiency on Land Facing the Japan Sea;  
Near the Bonin Islands, Operation Runs Simultaneously With Extraction of Uranium

Shiraishi: For example, is it not technically difficult to remodel an 80-meter long ship into a 100 meter ship?

Masuda: Patching a ship is a simple task for advanced Japanese shipbuilding technology. In addition to the fact that Japanese shipbuilding technology is behind the "Kaimei," as I have briefly mentioned before that this tidal wave power generation project is supported by the international organization, IEA, it is very beneficial that the "Kaimei" can command the influx of the wisdom of the entire world. Presently, the United States, England, Canada and Ireland are also participating in the "Kaimei" experiment. In fact, the experiment is conducted using air turbine power generators developed by an English research institute installed on the "Kaimei." Shortly, the United States will send over its own air turbine power generators. To compete, England made a large model of the "Kaimei" in a large-scale water tank experiment station and sent us reports on their various improvements. They tell us many thought provoking things, for example, recommending reducing area of the nozzle which blows air to turbines. But this suggestion is helpful. There is an atmosphere in which we feel it feasible to

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

create some economical air turbine power generators if we put everybody's ideas together. We appreciate the merit of international joint research.

Shiraishi: Well, then, entering into the discussion of a future vision of tidal wave power generation, what do you have in mind?

Masuda: In the seas near Japan, I would say again that the Japan Sea is promising. The IEA project will be closed by the end of this year. As the next step, we must think of remodeling the "Kaimei" to reduce the power generation cost. I believe this power obtained from the waves in the Japan Sea will serve as a precious source of energy during winter months when the areas on the side of the Japan Sea suffer from a power shortage.

In addition, speaking of my future dream, I would somehow like to utilize the high waves which often sink large size ships in the water on the east of the Bonin Islands in the sea to the south of the Main Island of Japan. Looking at the world's tidal wave energy distribution map, the world's highest value is shown in this area. I think it would be successful if we set a large-size tidal wave power plant ship in this sea area. It would not be a simple tidal wave power plant ship, but a salt water uranium adsorption plant currently being developed by a MITI project would be jointly loaded on the ship. According to MITI's project, uranium is extracted from salt water using electric power, and nuclear power generation is commenced using the uranium as fuel. This operation is estimated to obtain 10 times more electricity than the power initially consumed. I believe the grand total of power consumption in Japan is 60 million to 100 million kw yearly. Suppose the consumption is 100 million kw, it is then calculated that all the power needs of Japan will be supplied if 10 million kw, one-tenth of the needs, is generated by tidal wave power plants to extract salt water uranium for use in nuclear power plants in Japan.

Capsizing and Collisions Practically Unforeseeable; Only Floating, Rides Waves Safely

Shiraishi: Well, it seems such a magnificent plan, but do you ever anticipate accidents with the tidal wave power plant ships?

Masuda: Each plant ship shall give a tidal wave power generation capacity of 10,000kw. According to the plan previously mentioned, 10 millionkw tidal wave power generation facilities are required to supply the total power needs of Japan, which translates into 1,000 ships. If these plant ships are allowed to float in the water to the east of the Bonin Islands within the 200-nautical mile Japanese economic sea zone area, they are only sporadically present and will never collide with one another.

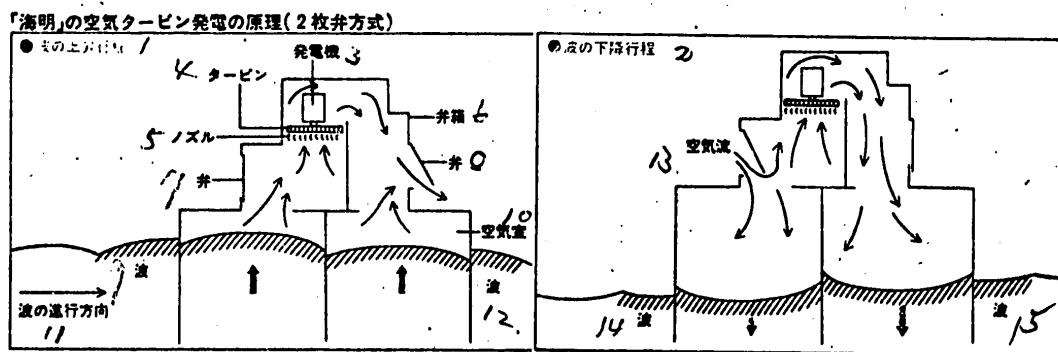
Shiraishi: Considering the rough waves in that sea area, is there any chance of any ships capsizing?

## FOR OFFICIAL USE ONLY

Masuda: That is also out of the question. Ships of 20,000-30,000 ton class will be safe no matter how rough the sea is, as long as they are not running. Ship accidents occurring in this sea area are attributable to the regular speed of the ships maintained regardless of the rough waves. Ships will be safe if they do as the "Kaimei," riding the waves with the hull at right angles to the waves.

Now that the water area within 200 nautical miles from the Japanese land is finally designated as an economic sea zone, we should not miss utilizing that vast body of water to the east of the Bonin Islands. Ideas to utilize this sea area are being advocated for ocean differential thermopower generation, utilization of solar energy pouring on the sea, etc. Japan is entirely surrounded by the sea, and we must make best use of this advantageous condition.

Principle of the Air Turbine Power Generation of the 'Kaimei' (Double Valve System)



## Key:

- |                            |                              |
|----------------------------|------------------------------|
| 1. Wave ascending process  | 9. Wave                      |
| 2. Wave descending process | 10. Air chamber              |
| 3. Generator               | 11. Wave traveling direction |
| 4. Turbine                 | 12. Wave                     |
| 5. Nozzle                  | 13. Air flow                 |
| 6. Valve cage              | 14. Wave                     |
| 7. Valve                   | 15. Wave                     |
| 8. Valve                   |                              |

COPYRIGHT: Nikkei-McGraw-Hill, Inc 1980

8940

CSO: 4105

END